REMARKS/ARGUMENTS

Claims 1-6, 8-11, 13-15, 19-22 and 27-31 stand rejected under 35 U.S.C. § 102(e) in view of U.S. Patent No. 6,988,190 (Park). Claims 23-24 stand rejected under 35 U.S.C. § 103(a) over Park in view of U.S. Patent No. 6,427,204 (Arimilli). Claims 25-26 stand rejected under 35 U.S.C. § 103(a) over Park in view of U.S. Patent No. 6,018,798 (Witt). Applicants respectfully traverse the rejections.

As to claim 1, Park nowhere teaches a dependency descriptor that includes live-in and live-out information. At best, Park teaches that an address trace includes start and end addresses as well as loop iteration counts. Nothing in Park anywhere teaches or suggests live-in or live-out information as set forth in claim 1. It is noted that the Office Action appears to contend that field 506 of Park, which merely provides a current loop iteration count, corresponds to such live-in and live-out information. However, as defined in the specification, such live-in and live-out "are the data upon which the dependency chain or trace depend for their execution as a whole... or that data which the dependency chain alters and other dependency chains may be depended on," respectively. Specification, \$\text{\$\geq 25\$}. As Park nowhere teaches this subject matter, claim 1 and the claims depending therefrom are patentable.

As to claim 10 similarly, Park nowhere teaches or suggests aggregate live-in and/or live-out information for a corresponding trace. Accordingly, claim 10 and the claims depending therefrom are patentable.

As to claim 20, Park nowhere teaches selecting and fetching a trace descriptor from a trace storage area and fetching an instruction set from an instruction storage separate from this trace storage area. Instead, in Park the address trace cache 220 includes address information, iteration information, as well as the routines, as shown in FIG. 5 of Park. Accordingly, claim 20 and the claims depending therefrom are patentable.

As to independent claim 28, Park nowhere teaches the presence of a dependency descriptor that includes dependency information to indicate at least one data on which a dependency chain depends. Instead, as described above the Office Action appears to contend that the recited dependency information is the iteration counts. However, such iteration counts nowhere indicate "data" on which a dependency chain depends. Accordingly, claim 28 and the claims depending therefrom are patentable.

For at least the same reasons as the independent claims discussed above, the dependent claims are patentable. Similarly, new dependent claims 34-36 are patentable at least for the same reasons as described above regarding independent claim 10 from which they depend.

The application is believed to be in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504.

Respectfully submitted,

Date:

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